

### REMARKS/ARGUMENTS

Favorable reconsideration of this application, in light of the present amendments and following discussion, is respectfully requested.

Claims 1-21 are pending. Claims 1-19 are amended. Support for the amendments to Claims 1-19 is self-evident inasmuch as these claims are amended to better conform to U.S. practice and to remove parenthetical expressions and multiple dependencies. Claims 20-21 are newly added. Support for newly added dependent Claim 20 can be found in original Claim 4, for example. Support for newly added dependent Claim 21 can be found in original Claim 6, for example. No new matter is added. The Abstract is amended to better conform with U.S. practice.

In the outstanding Office Action, the Abstract was objected to for improper format. Claims 6, 11, 12, 13, 15, 16, 17, and 18 were objected to as in improper form based on double multiple dependencies. Claim 8 was objected to as in improper form as not containing a reference to a claim previously set forth. Claims 7, 9, 10, 14, and 19 were objected to as depending from claims in improper form. Claim 1 was rejected under 35 U.S.C. § 102(b) as anticipated by Metcalf (PCT Application Pub. WO 98/42947). Claims 2-5 were rejected under 35 U.S.C. § 103(a) as obvious over Metcalf. Claims 1 and 6-19 were provisionally rejected under the doctrine of obviousness-type double patenting over the claims in copending Application Serial No. 10/580,607 and Application Serial No. 10/580,718.

Regarding the objection to the specification, the Abstract is amended to remove parenthetical expressions, the word "said", and other inappropriate language. Accordingly, Applicants respectfully submit that the objection to the specification (Abstract) is overcome.

Regarding the objections to Claims 6, 11, 12, 13, 15, 16, 17, and 18 as improper multiple dependent claims, the multiple dependencies are removed from these claims.

Accordingly, Applicants respectfully submit that the objections to Claims 6, 11, 12, 13, 15, 16, 17, and 18 is overcome.

Regarding the objection to Claim 8 as containing an improper dependency, Claim 8 is amended to depend from Claim 1. Accordingly, Applicants respectfully submit that the objection to Claim 8 is overcome.

Regarding the objection to Claims 7, 9, 10, 14, and 19 as depending from claims in improper format, all of the multiple dependencies in the claims have been removed. Claim 8 has been amended to depend from Claim 1. Accordingly, Applicants respectfully submit that the objection to Claims 7, 9, 10, 14, and 19 is overcome.

Regarding the rejection of Claim 1 as anticipated by Metcalfe, that rejection is respectfully traversed by the present response.

Amended independent Claim 1 recites, in part:

wherein the assembly is configured to develop, after  
diametral expansion in the plastic deformation region, sealing  
interference contacts sealing the assembly.

Accordingly, **after diametrical expansion** in the plastic deformation region, the assembly of the tubular elements is **sealed**.

In contrast, Metcalfe, which was also addressed in the corresponding European Patent Application, describes an expandable slotted tubing string to form a tubular **strainer** for collecting hydrocarbons. The strainer is provided with longitudinal slots (66) that are enlarged during expansion. Such strainers are used to maintain the earth around an oil well while permitting the passage of the hydrocarbons from the earth to the interior of the tube by the enlarged slots. As shown in annotated Figs. 1 and 3 from Metcalfe below and as discussed on page 11 of Metcalfe, the slots (66) form diamond shaped apertures after radial expansion, and these slots prevent formation of a **seal**. Rather, liquid is intended to flow through the apertures.

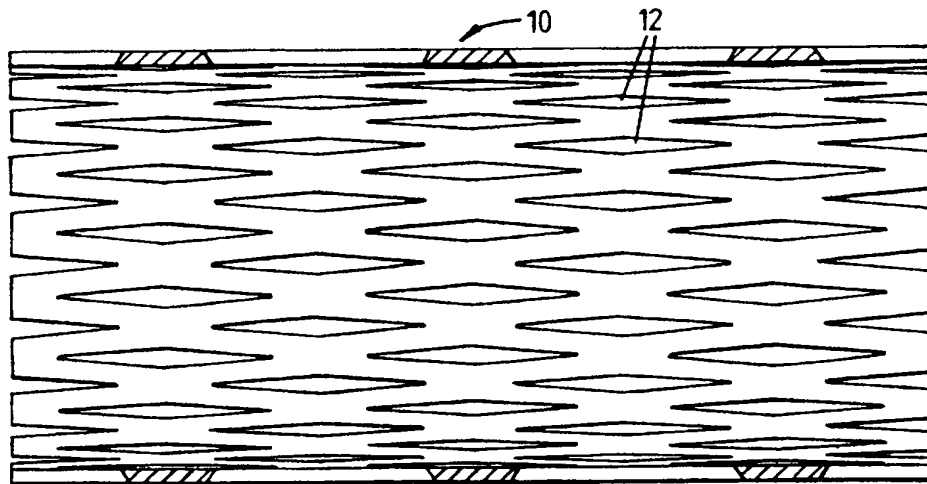


FIG. 1

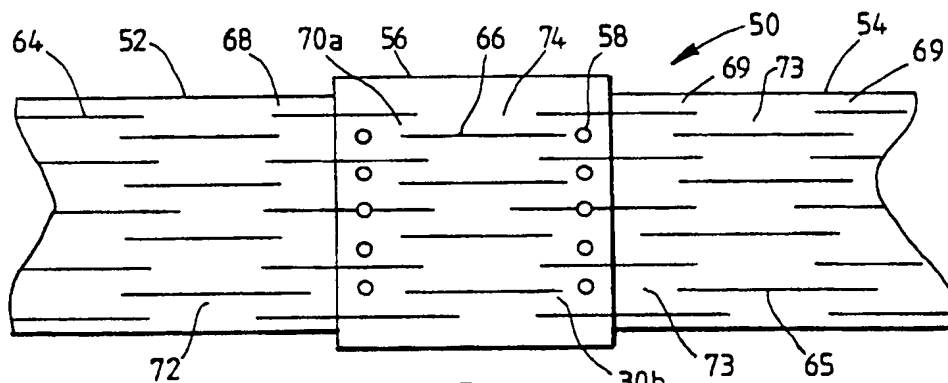


FIG. 3

The assembly recited in Claim 1 comprises a threaded tubular joint configured to, after diametrical expansion within the domain of plastic deformation (above elastic deformation domain), form a **sealing interfering** and tight contact, making the assembly tight at least to liquids such as petroleum and in some cases to gases.

The assembly of the claimed invention has a female-female type connection sleeve with a central portion initially provided over an outer surface, with an annular zone G2 having an initial reduced thickness selected such that the section of the sleeve M in the region of this zone G2 is greater than or equal to the product of the section of a common portion of the tube and the efficiency of the joint. Such features are neither taught nor suggested by Metcalf.

As the Metcalfe assembly has slots forming passages between the inside and the outside of the connector, Metcalfe is silent regarding a tightness or **sealing** property. Accordingly, Metcalfe does not disclose or suggest the sealing interference contact of Claim 1, and Claim 1 patentably distinguishes over Metcalfe.

As Claims 2-21 depend, directly or indirectly, from amended independent Claim 1, these claims patentably distinguish over Metcalfe for at least the same reasons as amended independent Claim 1 does.

Additionally, dependent **Claim 2** recites:

The assembly according to claim 1, wherein said zone of reduced thickness is in the form of a dish provided with a central portion having said maximum reduced thickness and lateral walls inclined at an angle of less than approximately 30°.

Thus, the lateral walls of the dish are inclined at an angle of less than approximately 30°.

The outstanding Office Action asserts that the above-noted angle is obvious as a mere discovery of the optimum or workable range of the angle of the wall.<sup>1</sup>

Applicants respectfully note that Metcalfe fails to recognize any significance to the angle of the walls of the intermediate portion (22), and a person of ordinary skill in the art would have had no reason to "optimize" these to arrive at the particular angle range recited in Claim 2. In this regard, Applicants respectfully note that only result-effective variables would be obvious to optimize, and these variables must be recognized for a result that would lead to the claimed feature.<sup>2</sup> Metcalfe makes no such recognition, and therefore, a person of ordinary skill in the art would not have found it obvious to modify Metcalfe to include all the features recited in dependent Claim 2.

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<sup>1</sup> Outstanding Office Action, page 8.

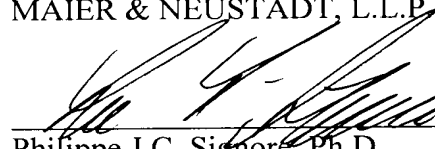
<sup>2</sup> MPEP § 2144.05(ii)(B) states: A particular parameter **must first be recognized as a result-effective variable**, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977).

Regarding the provisional rejection of Claims 1 and 6-19 over the claims of copending Application Nos. 10/580,607 ("U.S. '607") and 10/580,718 ("U.S. '718"), those rejections will be addressed when, if still maintained, the earlier filed of the above-noted applications is otherwise in condition for allowance. In this regard, Applicants respectfully note that U.S. '607 was filed as a PCT application on November 23, 2004, **the same day** as the present application was filed. Accordingly, as regarding U.S. '607, either that application or the present application may issue as a patent without the provisional obviousness-type double patenting rejection having been addressed.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, L.L.P.



Philippe J.C. Signore, Ph.D.

Attorney of Record

Registration No. 43,922

Lee Stepina

Registration No. 56,837

Customer Number

**22850**

Tel: (703) 413-3000

Fax: (703) 413 -2220

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